WHAT WENT WRONG IN CALIFORNIA

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Introduction

The failures of government institutions charged with guiding electricity industry restructuring have been apparent for quite some time. The California policy errors were errors of action, and therefore relatively easy to identify, but the Federal failures have been principally failures of inaction. It does appear, however, that some of the blame can persuasively be allocated to the "market" itself, in that in one important respect the "market" did not bring forth the results expected -- and promised by proponents of restructuring.

This view, however, must be tempered with a recognition that markets are producing satisfactory results in other parts of the nation and in other parts of the world. This, consequently, forces the question: *What was different about California*?

I. Summary of Conclusions

California policy makers committed serious errors of design and serious errors of implementation. Some of the implementation failures may have been the inevitable consequence of the design failures, but it is noteworthy that other market implementation agencies were also given faulty designs which they were able to reform and make work tolerably well. New England provides an example.

> **I. A.** It is useful to separate the causes of the California failures into two types; proximate causes and aggravating causes. Setting aside the possibility that the generators engaged in a conspiracy to create a shortage of capacity, for which there is no evidence and no persuasive charges, the proximate cause of the politically devastating price spikes manifested in the California electricity industry in the summer of 2001 and thereafter was the failure of the private generating companies (gencos) to build sufficient generating capacity to satisfy the demands of the market at economically defensible prices. That assertion, however, raises the more useful question: Why did they fail to build?

I. B. The most common assertion coming from those purporting to speak for gencos is that California law makes it unreasonably difficult to site generation plants in California. This answer is not a satisfactory one for the public nor for those who have supported restructuring.

In the debates leading to restructuring in California, and elsewhere, the proponents of restructuring did not promise to provide adequate generation if California would relax its siting and environment laws and practices. Instead, they insisted that "the market would provide," that is, "private enterprise would, in pursuit of profits, build generating plants as needed to preserve efficient prices." The question, therefore, remains: Why did private enterprise fail in California?

II. POOLCO versus Bilateral Trading models

Early debates in California revealed strongly conflicting views over the proper design of a deregulated generating services market: on one side of the argument were the gencos, gencos wannabees, energy merchants, energy merchant wannabees and large industrial energy users, and very important, Pacific Gas and Electric Co.

?? These parties quickly opted for a Bilateral trading model.

?? The system operator would be a public utility and continue to be regulated, but its principal concerns would be to ensure reliability and to implement Bilateral transaction as requested by market participants.

?? The distribution companies were to exit the merchant role as soon as practical.

?? Analogies with the natural gas restructuring of the 1980s were common.

?? This group supported a weak ISO.

?? These parties also took a position that all generation of the established utilities should be divested; that is, that utilities should be required to purchase all their electricity needs from the market.

?? These parties also insisted that utilities not be permitted to exercise monopsony powers. First, utilities must not be permitted to continue to serve their existing customers beyond a transition period, and second, they must not be permitted freedom to use long term contracts to the extent that would permit them to exercise monopsony powers.

Interim Summary: A summary of the position of the proponents of the Bilateral trading model is: "The objective is deregulation, not re-regulation."

II. B. Opposed were the proponents of POOLCO models. The essence of the various POOLCO models is that the ISO, a public utility, not only acts to preserve reliability but also manages a spot electricity market that is integrated with the dispatch process and provides continuing oversight of the market and the reliability system:

?? POOLCO models were supported by most academics involved in the California debate, by key staff members of the CEC, and by some staff Members of the CPUC. It was also supported by SDG&E and, at first, by SCE. Later SCE withdrew its support for the POOLCO model and joined the PG&E position.

?? The version of the POOLCO model that gained most support was called the "flexible POOLCO."

?? The POOLCO model's transparency features are also attractive.

III. California Failures of Design and Implementation

III. A. CPUC Failures. The CPUC, presumably in an attempt to be cautious, chose to implement the Mandatory POOLCO model for the first year and then, after review, consider movement to the Flexible POOLCO model.

The proponents of the Bilateral model, who had repeatedly expressed distrust of the CPUC and of all government regulators, vigorously opposed the creation of an independent system operator with substantial powers to oversee the operations of the market. They used the CPUC decision to

implement a mandatory POOLCO model to discredit all versions of the POOLCO model, the idea of a strong ISO and the CPUC itself

III. B. *California Legislative Failures.* The opponents of the POOLCO model used the CPUC decision as a vehicle for shifting the locus of debate and decision away from the CPUC and other public forums into the governor's office. Bargaining in this context obviously, did not include most of the parties to earlier debates, and, as far as I know, did not include the CEC or the CPUC. Bargains stuck in the Governor's office then went to the state legislature. The result was a mixture of inconsistent parts of the conflicting proposals.

III. B. 1. *The Sausage of Political Compromise.* While it would be a gross exaggeration to say that this compromise doomed the restructuring experiment to failure, it is a fair assertion that the system created was unnecessarily complex, and in a system that had to be complex, the creation of unnecessary complexity was a serious mistake.

III. B. 2. *The Consequence of Hubris.* A mistake of parallel importance, perhaps of greater importance, was to disperse powers and responsibilities so widely that there was no organization or person with responsibility and power to conduct ongoing review of market performance and to initiate reforms when experience demonstrated the need.

?? The ability to make reasonably quick changes in market design and in operating practices has been important in permitting the New England ISO and the PJM ISO to correct quickly design errors and faulty operating practices

?? The division of responsibilities of the ISO and the PX was such that neither had the capability to gain a comprehensive view of the California markets.

III. B. 3. *The Problem of the Lack of Demand Elasticity.* The political compromise did not require any users to purchase power in the competitive energy market for several years.

?? This policy **"**protected" users from high prices during peak periods and denied them the benefit of the low prices during off-peak periods. Customers, consequently, had no incentive to reduce their use during periods of high prices or to increase their usage during periods of low spot prices.

?? One manifestation of this problem was that the only rational bid into the spot market by the discos was a vertical demand curve.

?? The CPUC recognized this problem very early and acted to try to get some users, especially large ones, to "sell back" their power in peak-demand periods. The record suggest that they did not succeed in getting very much demand elasticity into the demand curve.

IV. California Compared to New England and PJM

The NE ISO and the PJM ISO are relatively strong ISOS. Each is a flexible POOLCO. Because each is charged with responsibilities to preserve reliability and to manage markets, they are able to integrate their spot market and the dispatch process. They, furthermore, have much more information at their disposal than does the California ISO and PX.

In California both the ISO and the PX had large "stakeholder" boards. In contrast, the three Northeastern SOS have relative small "independent" boards. This has permitted the FERC to place important responsibilities on the Northeastern ISOs and for those ISOs to respond and make relatively quick reforms to make their system work better.

These boards are preserving the credibility of the markets in their territories despite the fact that the legislatures in the Northeast states have made some of the same compromises that were made in California, especially ones that created inelastic demand curves.

?? Both the ISO and the PX are California charted corporations and each is governed by a "stakeholder" board of directors.

?? The California Legislature created an additional regulatory agency - the Electricity Oversight Board - to provide continuous surveillance of these organizations for the Legislature.

?? The ISO, was lodged in Folsom, near Sacramento, and charged with customary control area responsibilities and with implementing Bilateral transactions desired by private parties. The PX was located just north of Los Angeles and charged with responsibility for designing and implementing short-term energy markets.

The Issue of Countervailing Power. For a period of time, expected to last for several years, the IOUs in California were required to purchase all their electricity needs from the PX or from the ISO. Gencos, in contrast, were not required to sell through the PX or the ISO. They were free to sell into the PX and/or via physical Bilateral contracts to parties within or without California. Clearly, this asymmetry between the rights of gencos and discos was put in place to deny to the discos the opportunity to use their monopsony powers in bargaining with gencos.

This asymmetry had an unanticipated consequence. Responsibility was placed almost entirely on the Gencos to forecast demand and to build plants to meet that demand efficiently. When California denied to the utilities the right to enter long term contracts with gencos, it relieved the utilities of the responsibility of forecasting the need for generating plants. In effect, the gencos placed themselves in the position of being the only party with incentive and power to plan capacity expansion.

V. Failures of the Federal Government

In 1992, in the Energy Policy Act of 1992 (EPAct), implicitly promised to return to the subject of industry restructuring to carry forward the work of the FERC. The Congress has failed to deliver on its promises. Three federal government failures deserve emphasis:

(1) Interstate markets are smaller in geographical size and number of players than is desirable. If the Congress had acted in a timely manner, California would have had greater capability to call upon its neighboring states to fill the gap between local production and local demands.

(2) The Congress, by defaulting on is implied promise in the EPAct, has forced the industry to continue to implement reliability standards and practices that do not complement competitive market well.

(3) The gridlock between the President and Congress has weakened the FERC.